

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method comprising:

receiving a frame of data transmitted across a network into a receiving buffer of a target computer system;

recognizing and initiating a copy of said frame of data, said initiating comprising identifying at least one available Application Memory (AM) buffer in which to store a payload of said frame of data;

storing a header of said frame of data to a Receiving Frame Descriptor (RFD), said header comprising at least one sequence number;

zero-copying said payload of said received frame of data to said at least one AM buffer, wherein said zero-copying is aborted if an available Receiving Buffer Descriptor (RBD) queue entry is not identified.
2. (Original) The method of Claim 1 further comprising allocating a new AM buffer if at least one available AM buffer is not identified, said allocating comprising creating a Receiving Buffer Descriptor (RBD) within an available RBD queue entry, said RBD comprising a value corresponding to a start address and a value corresponding to a size of said new AM buffer.
3. (Canceled)

4. (Currently Amended) The method of Claim 2 ~~Claim 3~~ further comprising creating a flow descriptor if said new AM buffer is allocated, said flow descriptor identifying a zero-copy flow.
5. (Original) The method of Claim 2 wherein said identifying comprises searching a pre-defined number of RBD's within said RBD queue for an RBD corresponding to said at least one available AM buffer.
6. (Original) The method of Claim 5 wherein said search is based on a difference between a an AM buffer size and a size of said payload of said frame of data.
7. (Original) The method of Claim 6 wherein said search is aborted if said search is unsuccessful after searching said predefined number of RBD's within said RBD queue.
8. (Original) The method of Claim 7 wherein said RBD queue is indexed by a head pointer, a tail pointer and a Last Completed RBD Number (LCRN) pointer, said head pointer comprising a value corresponding to an address of a next available RBD entry within said RBD queue and said tail pointer comprising a value corresponding to an address of an oldest incomplete RBD within said RBD queue and said LCRN pointer comprising a value corresponding to a full AM buffer.
9. (Original) The method of Claim 8 wherein an RBD entry within said RBD queue corresponding to a full AM buffer is invalidated.

10. (Original) The method of Claim 9 wherein said invalidated RBD entry is used to store future or pending RBD's.

11-30. (Canceled)